



## The DIRT Society

# The Importance of Crop Rotation

The necessity for crop rotation is directly linked to the human diet. Consider that, in order to receive all of the vitamins and minerals you require to stay healthy, you must consume a variety of foods. This is because each item is made up of different nutrients; what one may lack, another will have in abundance. Follow this thought back to the farm or garden and you will understand that each crop removes and utilizes different elements from the soil. If a tomato has a markedly different nutrient make-up from broccoli, you can be sure that the tomato plant withdrew different compounds from the earth than the broccoli did.



Soil does not replenish its stores of these compounds on its own. It must accept them from contributors such as decaying material, compost or fertilizer. Thus, if nothing is added to the soil beneath a broccoli bed planted year after year, broccoli will no longer be able to grow. It will have pulled from the earth what it needed each season; eventually depleting the reserve so that it can no longer flourish in that area. Moreover, the resulting imbalanced soil may not sustain any garden crops and could require slow and costly reparation.

Nature, a time-tested farmer, rotates crops using fascinating devices. Seeds are eaten and excreted far away from the parent plant, or carried away on feet, fur, wings, whiskers, wind or water. The idea is to plant seeds far enough away that one plant's decedents will not compete for nutrients in the same area and expose themselves to disease, shared infestations and stunted growth in the process.

This is why crop rotation is a necessary practice. Rather than allowing a single crop with its specific nutrient needs to dry up the soil until it is imbalanced and unstable, farmers and gardeners must, like nature, plant a variety of fruits and vegetables; as surely as they must consume a variety of them.

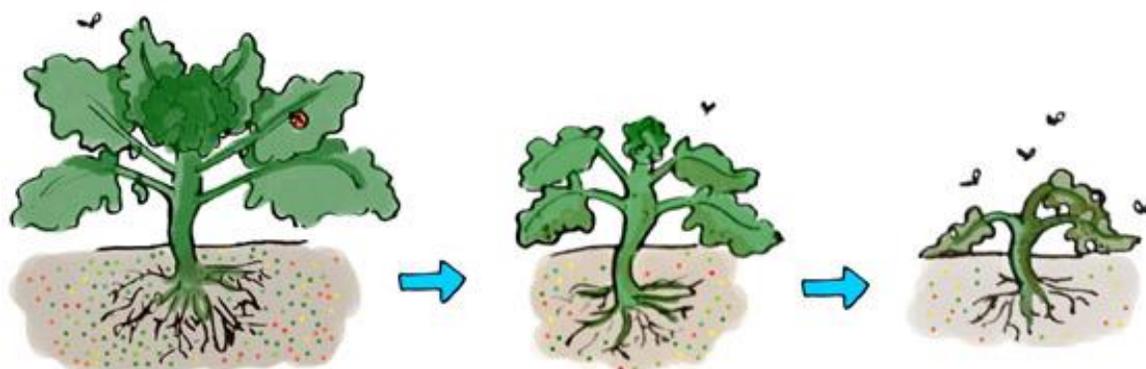
**Crop rotation can be summed up in a single directive: To best prevent disease and malnourishment, replace finished crops with plants from a different family.**

The implementation of crop rotation is only slightly more complicated than the above rule. To ensure that you are rotating effectively, you must know the families of the crops you plant, and keep a record of what, where and when. That is, you must record:

- What you planted, and the family it belongs to
- Where it was planted
- When it was grown

With this information on hand, you can be sure that plants with similar needs are not repeatedly planted in the same space, but are rotated to an area better stocked with the nutrients they desire.

Otherwise, you'll notice that harvest quality worsens with every consecutive planting:



After beginning a rotation practice, you will notice its many benefits. Farms and gardens that have been rotated are less susceptible to disease and grow more efficiently. The plants are not only healthier (meaning they have better immunity in place) but have been moved away from an area that may still contain diseases or pests that target them. Pests and microorganisms will take longer to locate their hosts, meaning that plants will be allowed to grow strong enough to fight them off when and if they arrive. This contrasts sharply with non-rotation, which may mean planting a patch of vegetables on top of a colony of dormant adversaries.

**Crop rotation is one of the simplest methods by which a food-grower can protect and encourage their crop, requiring no pesticides or chemical supplements. It is executed by a simple practice of record keeping and alternating a plant family's growing space.**